Quick Reference Guide

Using *Physics at the Farm* with Children

Your role

You are a guide, not a lecturer.

You do **not** need to teach physics or explain formulas.

Your job is to:
• look
• notice
• ask questions
• let children talk

That’s enough.

Simple routine (every page)

1. Look at the picture first
2. Ask: “What do you notice?”
3. Ask: “What’s happening?”
4. Read the text
5. Talk briefly

Keep it short and relaxed.

Keep it simple

Do:
• ask questions
• listen
• follow curiosity

Avoid:
• long explanations
• technical terms
• mini-lectures
• correcting every detail

Curiosity > correctness

Animal Guide (adult cheat sheet)

Animal	Physics idea (for adults)	Kid language (say this)
Cow	classical motion / predictability	things move normally
Bunny	uncertainty / probability	fuzzy / sometimes here, sometimes there
Sheep	coherence / many acting as one	they move together
Cat (Loke)	weak interaction / passes through	sneaky / slips through gaps
Goat	curved space / paths follow ground	hills bend “straight”
Chicken	exclusion / one per state	everyone needs their own spot
Pig	entropy / disorder grows	mess spreads and is hard to undo
Bee	kinetic theory / motion → pressure	buzzing bumps make push
Bird (Mika)	forces / lift & action–reaction	push air down, go up

Children only need the right column.

If you don’t know an answer

Say:
• “What do you think?”
• “Let’s try and see.”
• “Good question.”

You don’t need all the answers.

About symbols (ψ, Σ, PV=nRT, etc.)

Ignore them.

They are visual notes for older learners.

No explanation required.

If asked, say:
“These are scientist notes.”

Time guide

• 5–10 minutes per page
• stop while interest is high
• short sessions work best

Goal

Help children feel:

• the world is interesting
• questions are welcome
• science is safe to explore

Wonder first. Explanation later.

If children are engaged and talking, you are doing it right.